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# **AMENDMENTS TO THE DRAWINGS**

Please replace the originally submitted drawings Figs. 1-7 with the replacement drawings Figs. 1-7 submitted herewith.

### **REMARKS**

#### I. Claim Status

Claims 1-6 are pending in this application. Claims 1-5 have been amended, and new claim 6 has been added.

Claim 1 has been amended to recite a method for inhibiting angiogenesis. Support for this amendment may be found throughout the specification and in particular in paragraphs: 32, 36, 41, 42, 45, 52-54 and Figs. 4-5 of the published application (US 2006/0025377).

Claim 2 has been amended to recite a kit for treating cancer or inhibiting angiogenesis. Claims 3-5 have been correspondingly amended. Support for this amendment may be found throughout the specification and in particular in paragraphs 23, 26, 33, 38, and Fig. 3 (for treating cancer with tetraacetyl phytospingosine) and paragraphs 32, 36, 41, 42, 45, 52-54 and Figs. 4-5 (for inhibiting angiogenesis) of the published application (US 2006/0025377).

Claim 3 has also been amended for grammatical purposes (to delete "wherein" and to recite "an" before anti-cancer and irradiator).

Claim 4 has also been amended to recite "wherein the anti-cancer drug comprises at least one spingolipid derivative" for correlation with the list of one or more spingolipid derivatives recited in claim 5.

Claim 5 has been amended to delete recitation of an inadvertently included phrase and to correct a typographical error in the spelling of "N-acetylphytosphingosine." Support for this amendment may be found as commonly understood from the abbreviation "NAPS" in paragraphs 43 and 44 of the published application U.S. 2006/0025377.

New claim 6 directed to a method for treating cancer has been added. Support for this amendment may be found throughout the specification and in particular in paragraphs 23, 26, 33,

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38, and Fig. 3 (for treating cancer with tetraacetyl phytosphingosine) of the published application (US 2006/0025377).

No new matter is added by way of these amendments. Reconsideration of this application is respectfully requested.

### II. Priority Document

Submitted herewith is a certified copy of the priority document, Korean Application No. 10-2002-0076022, filed December 2, 2002. Applicants assert that the content of the specification, claims, drawings, and abstract of Korean Application No. 10-2002-0076022 is identical to and corresponds to that of PCT Application No. PCT/KR2003/002622 filed in English, and which corresponds to the pending application U.S. Serial No. 10/537,319. A statement certifying that the PCT Application No. PCT/KR2003/002622 is an accurate English translation of the Korean Application No. 10-2002-0076022, is submitted herewith.

The present amendments to claims 1-5 and new claim 6 are supported by the specification as described above. Therefore, the claims of the present application find support in the Korean priority application and are entitled to the earliest filing date of December 2, 2002.

## III. Drawings and Amendments to the Specification

The Examiner has objected to the drawings. Applicants are submitting herewith replacement drawings Figs. 1-7 corresponding to originally filed Figs. 1-7. Although no reasons were provided by the Examiner for the drawing objections, it is believed that the replacement drawings address the Examiner's objections, since there is no shading in the replacement graphs of Figs. 1-4 and 7. Additionally, a photo quality black and white version of Figs. 5A-C and Figs. 6A-D depicting cell cultures is submitted herewith. The only changes to the graphs and photos in the replacement drawings is the lack of shading (Figs. 1-4 and 7) and increased resolution (Figs. 5A-C and Figs. 6A-D). Thus, no new matter is added in the present amendment.

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Applicants are also herewith amending the "Brief Description of the Drawings" at paragraphs 20-21 of the published application US 2006/0025377, to fully recite the sections of Figs. 5 (A-C) and Figs. 6 (A-D).

Finally, various typographical errors in the spellings of "tetraacetylphytosphingosine," "tetraacetylsphingosine," and "N-acetylphytosphingosine" throughout the specification have been corrected. Support for the correct spellings may be found at least in the abstract, in claims 1-2, and in paragraphs 11, 16-22, 25, 36, 38, 39, 41, 42, 43, 52, 53, 55, and as commonly understood from the abbreviations TAPS and NAPS in paragraphs 43 and 44 of the published application U.S. 2006/0025377. Thus, it is believed that no new matter has been added in the present amendments.

#### IV. Rejections under 35 U.S.C. § 102

Claims 1-2 have been rejected under 35 U.S.C. §102(a) as being anticipated by Kim et al., J. Dermatology, Nov. 2003, 121:1135-1137 ("Kim"). The Korean priority application 10-2002-0076022, filed Dec. 2, 2002, corresponds to that of PCT Application No. PCT/KR2003/002622 (which corresponds to the present application). Thus, the subject matter of the specification, claims, drawings, and abstract are entitled to the earliest priority date of Dec. 2, 2002. The present amendments to claims 1-2 are supported by the specification as described above, and thus also find support in the priority application 10-2002-0076022, filed Dec. 2, 2002. Thus, the 102(a) rejections based upon Kim are moot.

Claims 1-2 have also been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,578,641 ("'641 patent"). In order to expedite prosecution of the present case, and without conceding the Examiner's position or the validity of the rejection, claim 1 has been amended to recite "a method for inhibiting angiogenesis, the method comprising administering to a subject in need thereof, an effective amount of tetraacetylphytosphingosine." Support for this amendment may be found at least in paragraphs 32, 36, 41, 42, 45, 52-54 and Figs. 4-5 of the published application (US 2006/0025377). Claim 2 has been amended to recite a kit "for treating cancer or inhibiting angiogenesis, comprising an inhibitor of angiogenesis containing tetraacetyl

phytosphingosine for treating cancer or inhibiting angiogenesis." Support for this amendment may be found throughout the specification and in particular in paragraphs 23, 26, 33, 38, and Fig. 3 (for treating cancer with tetraacetyl phytospingosine) and paragraphs 32, 36, 41, 42, 45, 52-54 and Figs. 4-5 (for inhibiting angiogenesis with tetraacetyl phytosphingosine) of the published application (US 2006/0025377). The referenced results show that tetraacetyl phytosphingosine inhibits angiogenesis and also causes apoptosis of cancer cells, thus also providing a treatment for cancer.

Anticipation requires that each and every element of the rejected claim(s) be disclosed in a single prior art reference. See MPEP § 2131 (8th Ed., Rev. 4, Jan. 2006). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The '641 patent relates to topical skin-conditioning compositions. Nothing in the '641 patent teaches or suggests the presently claimed methods for inhibiting angiogenesis, or kits relating to inhibiting angiogenesis or treating cancer.

Thus, it is respectfully submitted that the '641 patent does not anticipate claims 1-2. Accordingly, Applicants respectfully request that this rejection be withdrawn.

#### V. Rejections under 35 U.S.C. § 103

Claims 3-5 have been rejected under 35 U.S.C. §103(a) as being obvious over Kim, in view of WO/03/097631, published Nov. 27, 2003 (Korea Atomic Energy Research Institute). As described herein, the subject matter of the specification, claims, drawings, and abstract are entitled to the earliest priority date of Dec. 2, 2002. The present amendments to claims 3-5 are supported by the specification as described above, and thus also find support in the priority application 10-2002-0076022, filed Dec. 2, 2002. Thus, the 103(a) rejections based upon Kim, in view of WO/03/097631, published Nov. 27, 2003 (Korea Atomic Energy Research Institute) are moot.

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**CONCLUSION** 

In view of the above amendments and remarks, it is respectfully requested that the

application be reconsidered and that all pending claims be allowed and the case passed to issue.

Applicants reserve the right to pursue the canceled and/or non-elected subject matter in one or more

continuation or divisional applications.

If there are any other issues remaining, which the Examiner believes could be resolved

through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully

requested to contact the undersigned at the telephone number indicated below.

Respectfully submitted,

Dated: March 20, 2007

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